

Electronic Supplementary Information

Electronic excited states of guanine-cytosine hairpins and duplexes studied by fluorescence spectroscopy

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Table ESI-1. m/z values for oligomer sequences determined by MALDI-TOF mass spectrometry.

Sequences	Calculated	Found	Sequences	Calculated	Found
d2	556.4	556.7	hp2	1518.8	1519.2
d6	1793.2	1793.8	hp6	3992.4	3998.1
d10	3030.0	3031.2	hp10	6465.9	6466.8
			hp20	12649.8	12644.1

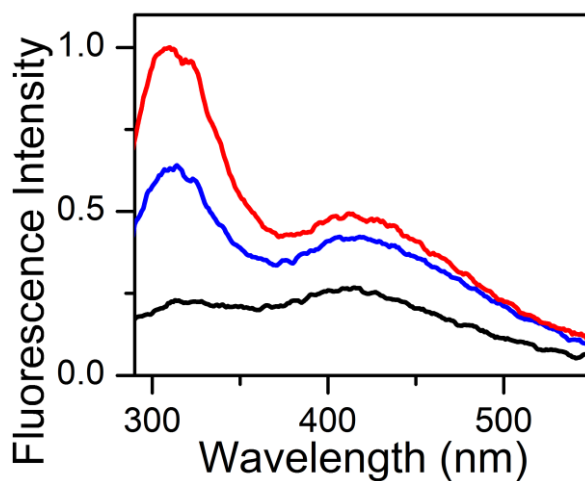


Figure ESI-1. Fluorescence spectra of hp20 before annealing (black), upon one annealing cycle (blue) and two repeated annealing cycles (red); $\lambda_{\text{ex}} = 255$ nm.

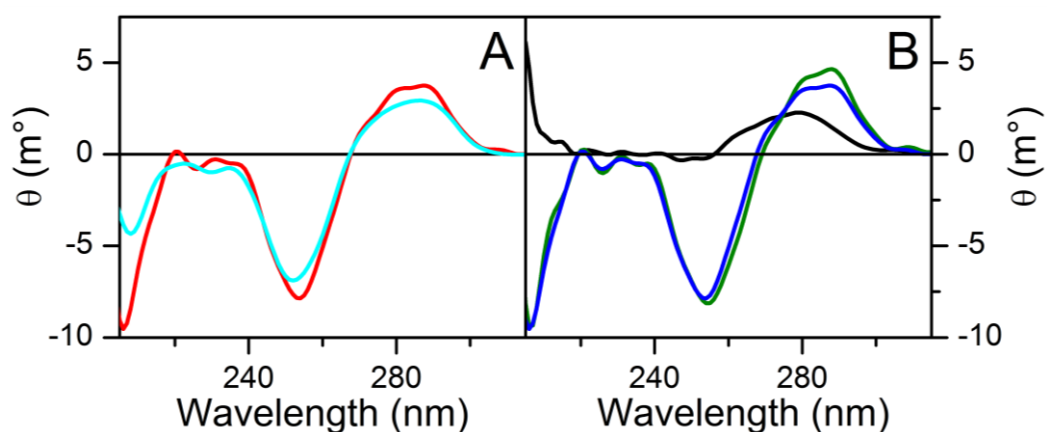


Figure ESI-2. CD spectra of A) hp10 (red) and hp20 (cyan) and B) d2 (black), d6 (green) and d10 (blue).

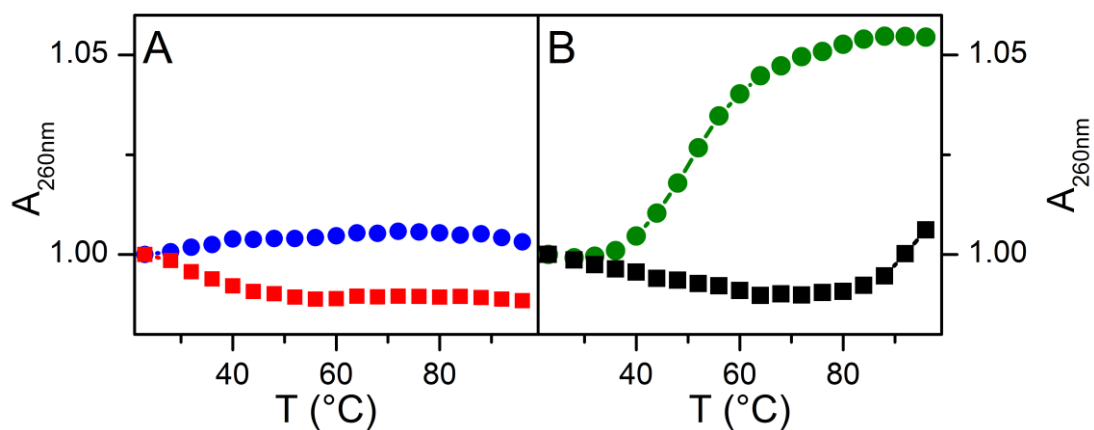


Figure ESI-3. Temperature dependence of the absorbance at 260 nm of A) d2 (blue) and hp2 (red), B) and d6 (green) and hp6 (black).

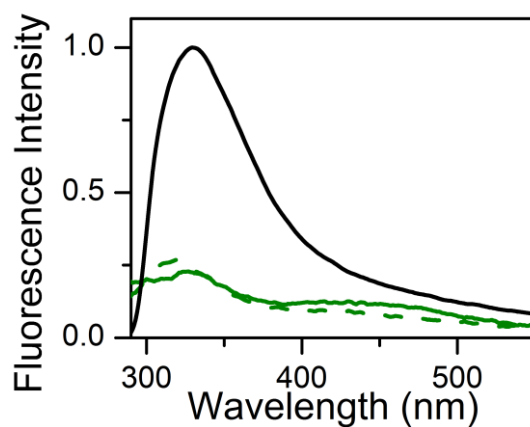


Figure ESI-4. Fluorescence spectra ($\lambda_{\text{ex}} = 255 \text{ nm}$) of hp6 (green, line), d6 (green, dash) and an equimolar mixture of dGMP and dCMP (line, black).